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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

GUILLERMET, FRED

ART UNIT

PAPER NUMBER

2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/003,257	Applicant(s) OHTSU, AKIRA	
	Examiner Fred Guillermetty	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-11 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Examiner Notes

1. Examiner cites particular columns, line numbers, and/or paragraphs in the references as applied to the claims below for the convenience of Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, Applicant fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by Examiner.
2. In view of the aforementioned, it is respectfully requested that Applicant reciprocate the courtesies extended by Examiner and cite specific support from the specification when amending claims. Examiner appreciates Applicant's good faith and diligence in this matter.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States, or

Art Unit: 2625

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by US 7,209,247 ("Iwadata").

With respect to claim 1, Iwadata discloses an image forming apparatus (Figure 1, image processing apparatus) (*col. 3, lines 10-12*) comprising:

a scanner (Figure 1, scanner 1) to read a document and provide image data corresponding to a document image (*col. 3, lines 13-15*);

a printer (Figure 1, printer 2) to form an image corresponding to the image data provided from the scanner (Figure 1, scanner 1) (*col. 3, lines 16-18*);

an error detector (Figure 1, image input/output controller 3) to detect an operating error of the scanner (Figure 1, scanner 1) and the printer (Figure 1, printer 2) that are devices (*col. 1, line 54 to col. 2, line 3 - the controller detects errors*); and

a controller (Figure 1, image input/output controller 3) to stop an operation of the device that cause the error (*col. 1, line 54 to col. 2, line 3 - the non-functioning component is stopped and reset*) and operate the device only that did not cause the error when the error detector detects the operating error (*col. 1, line 54 to col. 2, line 3 - the functioning component is not reset and is allowed to continue working*).

means (Figure 1, control panel 6) for setting an image forming condition (*col. 6, line 36 to col. 7, line 7*);

Art Unit: 2625

means (Figure 1, *copy key 603*) for deciding whether a synchronous control for operating the scanner and the printer in synchronous with each other for every page of document images is used (*col. 6, line 36 to col. 7, line 7*) or the asynchronous control for operating the scanner and the printer in asynchronous with each other is used when forming an image based on the image forming conditions that are set by the setting means (*col. 6, line 36 to col. 7, line 7 – see print key 605*);

wherein the image forming apparatus (Figure 1, image processing apparatus) is controlled based on the control mode decided by the deciding means (*col. 6, line 36 to col. 7, line 7 – the control panel determines the mode*).

With respect to claim 9, the instant claim possesses the same limitations as claim 1 only in the form of a method. Accordingly, the arguments applied to claim 1 are herein applied, *mutatis mutandis*.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 2, 3, 10, and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,209,247 (“Iwadate”) and further in view of US 5,845,057 (“Takeda”).

With respect to claim 2, Iwadata discloses an image forming apparatus (Figure 1, image processing apparatus) comprising:

a scanner (Figure 1, scanner 1) to read a document and provide image data corresponding to a document image (*col. 3, lines 13-15*);

a printer (Figure 1, printer 2) to forming an image corresponding to the image data provided from the scanner (Figure 1, scanner 1) (*col. 3, lines 16-18*);

an error detector (Figure 1, image input/output controller 3) to detect an operating error of the printer (*col. 1, lines 48-53*); and

a controller (Figure 1, image input/output controller 3) to suspend the operation of the printer and by operating the scanner (Figure 1, scanner 1) only, completing the read of the document when an operating error is detected by the error detector (Figure 1, image input/output controller 3) (*col. 1, lines 48-53*).

Iwadata fails to explicitly disclose wherein the controller includes means for judging whether the error detected by the error detector is an error that be solved; and

means for suspending only the operation of the printer when the error is an error that can be solved.

However, Iwadata does disclose suspending the operation of only the printer when it is an error that can be solved (*col. 11, lines 5-17 – when there is an error that can be solved, for instance by restarting the printer component, then only that operation is suspended*).

Additionally, Takeda, working in the same field of endeavor, discloses wherein the control means includes: means for judging whether the error detected by the error detector is an error that can be solved (*col. 18, line 56 to col. 19, line 5 - see error processing section and error processing determining table of Fig. 14*); and means for suspending the operation of the printer when the error is an error that can be solved (*col. 10, lines 3-34 – see Fig. 10*). This advantageously allows the system to better deal with errors.

Thus, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to have implemented Takeda's teachings since doing so would predictably and advantageously allow the system to better deal with errors.

With respect to claim 3, Iwade discloses the image forming apparatus (Figure 1, image processing apparatus) according to claim 2.

Iwade fails to explicitly disclose all the limitations of claim 3.

Takeda, working in the same field of endeavor, discloses: means for judging a degree of the error detected by the error detector (*col. 18, line 56 to col. 19, line 5 - see error processing section*); and means for suspending the operation of the printer only according to the degree of the error (*col. 18, line 56 to col. 19, line 5 – see error processing determining table of Fig. 14*). This advantageously allows the system to better deal with errors.

Thus, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to have implemented Takeda's teachings since doing so would predictably and advantageously allow the system to better deal with errors.

With respect to claim 10, the instant claim possesses the same limitations as claim 2 only in the form of a method. Accordingly, the arguments applied to claim 2 are herein applied, *mutatis mutandis*.

With respect to claim 11, the instant claim possesses the same limitations as claim 3 only in the form of a method. Accordingly, the arguments applied to claim 3 are herein applied, *mutatis mutandis*.

7. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,209,247 ("Iwadata").

With respect to claim 6, Iwadata discloses the image forming apparatus (Figure 1, image processing apparatus) according to claim 1, further comprising:

means for switching the control mode when an error is generated during the image forming operation (*col. 10, line 22 to col. 11, line 17 – see Figs. 17A-17C*).

Iwadata fails to explicitly disclose this switching occurring when in the copying (i.e., synchronous) mode. Instead, Iwadata's exemplary illustration displays this occurring when in the printing mode.

However, the advantages provided while in the print mode would equally apply to the copy mode. Implementing the switching means while in the copy mode as done for the printing mode would advantageously increase the versatility of the device (*col. 11, lines 13-17*).

Thus, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to have implemented the switching means while in the copy

Art Unit: 2625

mode as done for the printing mode, since doing so would predictably and advantageously increase the versatility of the device.

With respect to claim 14, the instant claim possesses the same limitations as claim 6 only in the form of a method. Accordingly, the arguments applied to claim 6 are herein applied, *mutatis mutandis*.

8. Claims 7, 8, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,209,247 (“Iwadata”) and further in view of US 2005/0024680 (“Tanaka”).

With respect to claim 7, Iwadata discloses the image forming apparatus (Figure 1, image processing apparatus) according to claim 1.

Iwadata fails to explicitly disclose all the limitations of the instant claim.

However, Iwadata does disclose synchronous and asynchronous modes as stipulated in the aforementioned arguments of claim 5 and further discloses the function of copying (synchronous mode) bypassing much of the memory used in other functions (*col. 4, lines 34-47*). This advantageously allows for faster and more efficient copying.

Tanaka, working in the same field of endeavor, discloses a first memory to store image data (*paragraph [0038] – see element 105 of Fig. 1*); compression/expansion means for compressing or expanding the image data (*paragraph [0038] – see element 106 of Fig. 1*); a second memory to store the image data compressed by the compression/expansion means (*paragraph [0038] – see element 107 of Fig. 1*); wherein the document image data read by the scanner is stored in the first memory (*paragraph [0042] – see element A of Fig. 1*), compressed by the compression/expansion means

Art Unit: 2625

and stored in the second memory (*paragraph [0042] – see element B of Fig. 1*), expanded by the compression/expansion circuit (*paragraph [0042] – see element D of Fig. 1*), stored in the first memory and then, provided to the printer (*paragraph [0042] – see element C of Fig. 1*). This advantageously allows for improved memory optimization (*paragraph [0014]-[0015]*).

Thus, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to have combined Tanaka's memory system with Iwadate's device, and in particular Iwadate's memory bypass for synchronous mode, since doing so would predictably and advantageously allow for faster and more efficient copying as well as improved memory optimization.

With respect to claim 8, Iwadate discloses the image forming apparatus (Figure 1, image processing apparatus) according to claim 7, further comprising:

means for switching the synchronous control mode to the asynchronous control mode when the synchronous control is decided by the deciding means and an error is generated during the image forming operation (*col. 10, lines 22-36*).

With respect to claim 15, the instant claim possesses the same limitations as claim 7 only in the form of a method. Accordingly, the arguments applied to claim 7 are herein applied, *mutatis mutandis*.

With respect to claim 16, the instant claim possesses the same limitations as claim 8 only in the form of a method. Accordingly, the arguments applied to claim 8 are herein applied, *mutatis mutandis*.

Response to Amendment

9. The **specification** was objected to for a non-descriptive title and minor informalities. Examiner has fully considered Applicant's amendment and has found it to be in compliance.

Accordingly, the objection with respect to specification is *withdrawn*.

10. **Claims 4, 5, 6, 8, 12, 13, 14, and 16** were rejected under 35 USC 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Examiner has fully considered Applicant's amendment and has found that they appear to be in compliance.

Accordingly, the rejection of claims 4, 5, 6, 8, 12, 13, 14, and 16 with respect to 35 USC 112 is *withdrawn*.

Response to Arguments

11. Applicant's arguments filed 01 October 2008 have been fully considered but they are not persuasive.

With respect to Applicant's arguments on page 9 of Applicant's remarks, Applicant argues that limitations are not taught. Examiner respectfully disagrees.

The Examiner respectfully asserts that the limitations of (1) setting the image forming conditions (*col. 6, line 36, to col. 7, line 7 of Iwadata – see at least copy mode key 603 and printer mode key 605*); (2) deciding whether a synchronous control for operating the scanner and the printer synchronously for each page of document images is used or an asynchronous control for operating the scanner and the printer

Art Unit: 2625

asynchronously is used based on the set image forming conditions when executing the image formation (*col. 6, line 36, to col. 7, line 7 of Iwadata – synchronous mode is constituted by at least the copy mode and asynchronous is constituted by at least the printer mode*); and (3) executing control based on the decided control (*col. 6, line 36 to col. 7, line 7 of Iwadata – the apparatus acts according to the input of the control panel*) are taught by the prior art of record. Additionally, the Examiner respectfully asserts that the limitations of (1) judging whether the detected error is a solvable error (*col. 11, lines 5-17 of Iwadata – when there is an error that can be solved, for instance by restarting the printer component, then only that operation is suspended; also col. 18, line 56 to col. 19, line 5 of Takeda – see error processing section and error processing determining table of Fig. 14*) and (2) wherein only the operation of the printer is stopped when the error is the solvable error (*also see col. 10, lines 3-34 of Tadeka – Fig. 10*) are also taught by the prior art of record.

With respect to Applicant's arguments on pages 10-12 of Applicant's Remarks, Applicant argues that Iwadata fails to disclose all the claimed limitations and specifically references Figs. 5A, 5B, and 7 of Applicant's disclosure. The Examiner respectfully disagrees.

While the Examiner tentatively agrees that the disclosure of Iwadata fails to explicitly mirror the exemplary embodiment as cited by Applicant in Figs. 5A, 5B, and 7, the Examiner respectfully asserts that the claims do not explicitly mirror the exemplary embodiment either. The Examiner has interpreted the claims under broadest reasonable interpretation. When the claims are read broadly, as they must be read

Art Unit: 2625

during the examination process [see *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) “claims must be interpreted as broadly as their terms reasonably allow”], the Examiner finds that the interpretation of terms such as “synchronous”, “asynchronous”, and others is appropriate. Additionally, Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With respect to Applicant’s arguments on pages 12-14 of Applicant’s remarks, Applicant argues that the prior art of record fails to explicitly disclose all of the claimed limitations. The Examiner respectfully disagrees.

Iwadata discloses that when there is an error that can be solved, for instance by restarting the printer component, then only that operation is suspended (*col. 11, lines 5-17*). Additionally, Tadeka, working in the same field of endeavor, discloses error processing sections and error processing determining tables (*col. 18, line 56 to col. 19, line 5; Fig. 14*). Furthermore, Tadeka discloses error detecting tables (*col. 11, line 47 to col. 12, line 36; see Fig. 13*) that work in conjunction with the error processing determining table where certain problems have printing stopped.

With respect to Applicant’s arguments on pages 14-15 of Applicant’s remarks, Applicant argues that the level of ordinary skill in the art has been incorrectly ascertained. Examiner respectfully disagrees.

One having ordinary skill the art at the time of Applicant’s invention would readily recognize the relevance of Iwadata and Takeda. The fundamental principle of stopping

Art Unit: 2625

only a malfunctioning component while still continuing operation of other components of the device (*see at least Applicant's abstract*) is well within the scope of Iwadata and Takeda. The prior art of record discloses this underlying principle in at least the abstract of Iwadata (*see last sentence*) and Fig. 14 of Takeda (*see col. 12, lines 37-67 and error code "E003"*).

With respect to Applicant's arguments on pages 15-16 of Applicant's remarks, Applicant argues that the Office Action all but relies on Applicant's disclosure for motivation. The Examiner respectfully disagrees.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2625

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Guillermetty whose telephone number is (571)270-5081. The examiner can normally be reached on Mon - Thurs, 8:00AM - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fred Guillermet/
Examiner, Art Unit 2625

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625